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PHYSICAL EDUCATION

EXERCISE AND AGING

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Abstract

The clock ticks for all men, with each tick comes change. For men who manage to avoid major medical problems, the changes are slow and gradual, but they do add up. Here are some things that again can do to you-if you give up and let father Time take his toll. No man can stop the clock, but every man can slow its tick. Research shows that many of the changes attributed to aging are actually caused in large part by disuse. It's new information, but it confirms the wisdom of Dr. William Buchan, the 18th – century Scottish physician who wrote, "Of all the causes which conspire to render the life of a man short and miserable, none Endurance exercise is also the best way to protect the body's tissues to insulin, and lowers blood sugar levels. Exercise boosts the HDL ("good") cholesterol and lower levels of LDL ("bad") cholesterol and triglycerides.

Keywords: Exercise, Aging

Introduction

The loss of muscle continues, eventually reducing a man's musculature by up to 50% contributes to weakness and disability. At the same time, muscles and ligaments get stiff and tight. Although men have a lower risk of osteoporosis ("thin bones") than women, they do lose bone calcium as they age, increasing the risk of fractures. One reason for the drop in muscle mass and bone density is a drop in the male hormone testosterone, which declines by levels and reproductive capacity throughout life, many experience a gradual decline in libido and sexual vigour. The nervous system also changes over time. Reflexes are slower, coordination suffers, and memory lapses crop up at embracing times. The average person gets less sleep in maturity than in youth, even if he no longer needs to set his alarm clock. Not surprisingly spirits often sag as the body slows down.

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Exercise vs. aging		
	Effect of aging	Effect of exercise
Heart and circulation		
Resting heart rate	Increase	Decrease
Resting heart rate	Decrease	Slows the decrease
Maximum heart rate	Decrease	Increase
Maximum pumping capacity	Decrease	Decrease
Heart muscle stiffness	Increase	Decrease
Blood vessel stiffness	Increase	Decrease
Blood pressure	Increase	Decrease
Blood		
Number of red blood cells	Decrease	No change
Blood viscosity (“thickness”)	Increase	
Lungs		
Maximum oxygen uptake	Decrease	No change
Intestines		
Speed of emptying	Decrease	Decrease
Bones		
Calcium content and strength	Decrease	Increase
Muscles		
Muscles mass and strength	Decrease	Increase
Metabolism		
Metabolic rate	Decrease	Increase
Body fat	Increase	Decrease
Body sugar	Increase	Decrease
Insulin levels	Increase	Decrease
LDL (“bad”) cholesterol	Increase	Decrease
HDL (“good”) cholesterol	Decrease	Increase
Sex hormone levels	Decrease	Slight decrease
Nervous system		
Nerve conduction and reflexes	Slower	Decrease
Quality of sleep	Decrease	Increase
Risk of depression	Increase	Decrease
Memory lapses	Increase	Decrease

Resistance exercise using light weights or exercise machines will enhance muscle mass and strength and preserve bone calcium. You’ll need to learn what to do, and instructors help. But with simple directions and precautions, most, men can develop a safe and effective home program for themselves. Flexibility training will help keep you supple as you age. Stretching exercises are an ideal way to warm up before and cool down after endurance exercise. Like strength training, 20 minutes of dedicated time two or three times a week is ideal. Yoga classes are very helpful, but most men can learn to stretch for health on their own. Exercises for balance will also help retard some common effects of again. They will help you move gracefully, avoid injuries, and prevent the falls that cripple so many older Americans. To keep your body as young as possible for as possible, keep it moving. As usual, Hippocrates got it right about 2,400 years ago, explaining, “That which is used develops; that which is not wastes away.” Not by exercise alone. Exercise is one way to slow the again process, but it works best in combination with other measures. Here are some other tips to help you age well.

Conclusion

Eat properly. Reduce your consumption of saturated fat, trans fatty acids, and cholesterol. The omega-3s and monounsaturated fats, buts, olive oil, and possibly canola oil are desirable oil are desirable in moderation. Eat lots of fruits, vegetables, whole grains, and non-fat dairy products. Favor complex carbohydrates and high-fibre foods, but reduce your consumption of simple sugars. Get about 15% of your calories from protein. Cut back on salt and processed foods. Keep your caloric consumption down and stay as lean as possible.

Reference

1. Asmussen, E. & Molbech, S.V. Methods and standards for evaluation of the physiological working capacity of patients. Hellerup, Denmark: Communications of the Testing and Observation Institute, 4, 1-16, 1959.
2. Comfort, A. Aging. The Biology of Senescence. 2nd Ed. New York: Holt, Rinehart, Winston, 1979.
3. Fiatarone, M.A., Marks, E.C., Ryan, N.D., Meredith, C.N., Lipsitz, L.A. & Evans, W.J. High intensity strength training in nonagenerians.

Effects on skeletal muscle. Journal of the American Medical Association, 263, 3029-3034, 1990.
4. Fries, J.F. Aging Well. Reading, Mass.: Addison-Wesley, 1989.
5. Health & Welfare Canada. Health Promotion Survey: Ottawa: Health & Welfare, Canada.